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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,829	01/25/2001	Frank Rui-Feng Chu	ARC920000016US1	2605
26381	7590	12/27/2004	EXAMINER	
LACASSE & ASSOCIATES, LLC 1725 DUKE STREET SUITE 650 ALEXANDRIA, VA 22314			JORGENSEN, LELAND R	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**MAILED**

**DEC 27 2004**

**Technology Center 2600**

Application Number: 09/768,829  
Filing Date: January 25, 2001  
Appellant(s): CHU ET AL.

Jaclyn A. Schade  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 28 September 2004.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The appeal brief does not include any grouping of claims.

**(8) *ClaimsAppealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

EP 0,889,388 A1	LU	07-1999
5,818,361	ACEVEDO	10-1998
5,841,374	ABRAHAM	11-1998
5,812,117	MOON	09-1998
5,825,353	WILL	10-1998
5,128,672	KAEHLER	07-1992
5,841,849	MACOR	11-1998
6,072,471	LO	06-2000

***(10) Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 2, and 6 rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al.

This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 2 – 3 and 23.

Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Lu. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 3 – 4, and 24.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Acevedo. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 3 – 4 and 23.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Abraham. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 5 – 6 and 23.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Moon. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 6 – 8 and 23.

Claims 8, 9, 12, and 31 - 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Will. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 8 – 10 and 23.

Claims 10, 11, 13, and 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Will and further in view of Kaehler. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 10 – 12 and 23.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Will and further in view of Wang. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 12 – 13 and 23.

Claims 15, 16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Wang. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 14 – 15.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Wang and further in view of Kaehler. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 15 - 16.

Claims 20 – 29 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macor in view of Lu. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 16 - 21.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu in view of Kaehler and further in view of Lo. This rejection is set forth in a prior Office Action, mailed on 15 June 2004, paper no. 17, pp. 21 - 22.

***(11) Response to Argument***

**Claims 1, 2, and 6.** As described in these claims, applicant's invention is identical to the invention taught by Wang. For example, compare claim 1 and Wang, figure 1b. Claim 1 describes a reduced character entry system comprising a first set of multiple keys. Wang teaches a first set of multiple keys [102-11 – 102-7] that are labeled 1, 2, 3, 4, and 5 in figure 1b. Claim 1 teaches that the first set of multiple keys represents a selected subset. Wang shows that the first set of multiple keys [102-11 – 102-7] represents a selected subset, specifically "S", "F", "H", "K", and ":" highlighted in the display 101a. This selected subset "S", "F", "H", "K", and ":" comprises a single row of characters from a set of QWERTY style keyboard rows. Each of said keys is associated with a character of said selected subset. Key 1 is associated with "S," Key 2 is associated with "F," and so forth. When any of said first set of multiple keys is actuated said associated character is input to said electronic appliance. Thus, if the user pushes key 1, the "S" is input to the electronic appliance.

Claim 1 describes the system as comprising a second set of keys. At least one of said set of keys is actuated to change said selected row. Wang shows the second set of keys 102-1 – 102-6. Wang teaches

For example, if key 102-5 is pressed, the letters in two-row set 103b are selected, and because key 102-5 of the vertical group is selected as the first key of a two-keystroke sequence, letters of the bottom row of row set 103b (i.e. the letters "S", "F", "H", "K" and ":") are highlighted in this embodiment to indicate the possible

selections of two-row set 103b, as shown in FIG. 1b. Then, by selecting a key from the vertical group, the selected letter is uniquely determined. In this example, selecting key 102-10 selects the letter "D".

Wang, col. 3, lines 44 – 53. See also Wang, figures 1a and 1c.

Claim 1 describes the system as comprising a electronic display with said display displaying the characters of the selected row. In figures 1a – 1 c, Wang shows such display 101.

Applicant argument assume limitations that are not in the claims. For example, applicant argues that “Wang teaches the display of a complete set of characters in many rows (Wang, figure 1a, element 101). Wang does not provide, nor suggest, a reduced character entry system using a single row to achieve the resulting reduced set.” Appeal Brief, page 7. This assumes a limitation that the display only show one single row at a time. No such limitation is found in the claim. Moreover, applicant uses the broad term “comprising” not once but twice in the claim. “The transitional term ‘comprising’ ... is inclusive or open-ended and does not exclude additional, unrecited elements or method steps.” MPEP 2111.03 [R-2].

**Claim 30.** Claim 30 describes a “a first subset of a set of characters” with the “set of input characters comprising a row from a set of keyboard rows.” Applicant argues that Lu teaches that “The subsets that are associated with the display characters are sequences of the alphabet (e.g. A through F, G through L, etc.) and not keyboard style rows.” Appeal Brief, p. 9. Lu, however, teaches, “The normal **keyboard** symbols, including alphabet, numeric, and standard punctuation marks, are arranged into tow table 2 and 4. The two tables 2 and 4 are shown in FIG. 1.” Lu, col. 5, lines 11 – 15 [bold added]. Lu adds, “To enter a given desired symbol, the user first selects an index symbol whose corresponding subset (i.e., **row** of the table

of FIG. 1 contains the desired symbol.” Lu, col. 6, lines 1 – 4 [bold added]. Thus, Lu teaches that a set of input characters comprise a row from a set of keyboard rows.

Applicant also argues that examiner on pages 11 and 12 of the prior action explicitly states that Lu does not specifically state that one or more of the first set of input keys are on a side surface. At first glance, examiner’s statement that Lu shows a first set of input keys located on a side surface in the 102 rejection of claim 30 seems to be in direct contradiction with statements in the 103 rejections of other claims that Lu does not show such first set of input keys located on a side surface. Each statement, however, must be taken in context of the claim as written. Lu teaches an electronic appliance such as hand-held personal digital assistant or a pager. As noted in the prior office action, it is inherent that a personal digital assistant or a pager includes a housing having top and bottom surfaces and a plurality of side surfaces connecting the top and bottom surfaces. That is, the housing is a hexahedron having six faces. Typically, two faces are long and wide, two faces are relatively short and thin, and two faces are long and thin. Sometimes, the long and wide faces are labeled top and the bottom with the remaining faces labeled the side. Other times the short and thin faces are labeled top and bottom with remaining faces being labeled the sides. In claim 30, neither the top, bottom, or side surfaces are described or distinguished from each other. Thus, Lu, in figures 1 – 7, show keys on a face that can be described as the side surface. In the other claims, however, the side surface is described and distinguished from the top and bottom surfaces. Thus, in these claims, the description of the side surfaces is limited; in claim 30 the description is broad.

**Claim 3.** Claim 3 adds that each key of the first set of multiple keys has a electronic character display and an input mechanism. Consider Key 102-11 shown in Wang, figure 1b.

The key is labeled 1. With the electronic character display as described in claim 3, this key would have the "S" displayed so that the user would know that the key is now the "S" key. Acevedo teaches such. For the reasons stated in the rejection of claim 3 in examiner's prior action, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Acevedo keys with Wang so that the user may more easily know which key produces which letter.

**Claims 4 and 5.** See discussion of claims 1, 2, and 6 above and the prior office action.

**Claim 7.** See discussion of claims 1, 2, and 6 above and the prior office action.

**Claims 8, 9, 12, and 31 – 33.** See discussion of claim 30 above and the prior office action.

**Claims 10, 11, 13, and 34.** See discussion of claims 1, 2, and 6 above and the prior office action.

**Claim 14.** See discussion of claims 1, 2, and 6 above and the prior office action.

**Claims 15, 16, 18, and 19.** See discussion of claims 1, 2, and 6 above and the prior office action.

**Claim 17.** See discussion of claims 1, 2, 6, and 30 above and the prior office action.

**Claims 20 – 29 and 35.** See discussion of claim 30 above and the prior office action.

**Claim 36.** See discussion of claim 30 above and the prior office action.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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December 21, 2004

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